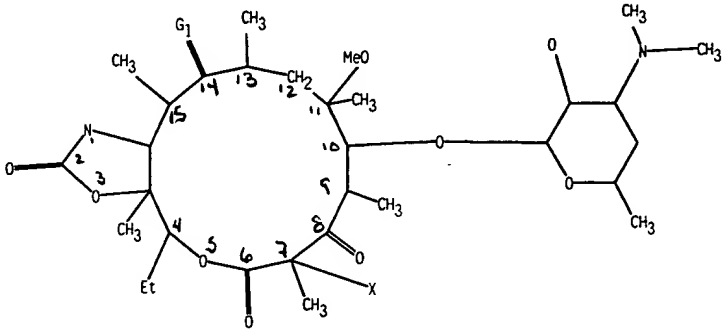
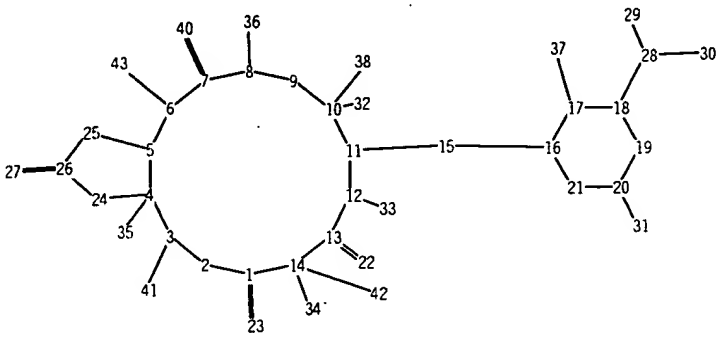
1/416,022

January 4, 2001





chain nodes :
15 22 23 27 28 29 30 31 32 33 34 35 36 37 38 41 42 43
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 16 17 18 19 20 21 24
25 26
ring/chain nodes :
40
chain bonds :
1-23 3-41 4-35 6-43 8-36 10-32 10-38 11-15 12-33 13-22 14-34
14-42 15-16 17-37 18-28 20-31 26-27 28-29 28-30
ring/chain bonds :
7-40
ring bonds :
1-2 1-14 2-3 3-4 4-5 4-24 5-6 5-25 6-7 7-8 8-9 9-10 10-11
11-12 12-13 13-14 16-17 16-21 17-18 18-19 19-20 20-21 24-26
25-26
exact/norm bonds :
1-2 1-14 1-23 2-3 3-4 4-5 4-24 5-6 5-25 6-7 7-8 7-40 8-9
9-10 10-11 11-12 11-15 12-13 13-14 13-22 15-16 16-17 16-21
17-18 17-37 18-19 18-28 19-20 20-21 24-26 25-26 26-27
exact bonds :
3-41 4-35 6-43 8-36 10-32 10-38 12-33 14-34 14-42 20-31 28-29
28-30

G1:O,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:Atom 17:Atom
18:Atom 19:Atom 20:Atom 21:Atom 22:CLASS 23:CLASS 24:Atom 25:Atom
26:Atom 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS
33:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS 40:CLASS
41:CLASS 42:CLASS 43:CLASS

=> d his

(FILE 'HOME' ENTERED AT 18:44:56 ON 04 JAN 2001)

FILE 'REGISTRY' ENTERED AT 18:45:01 ON 04 JAN 2001
L1 STRUCTURE UPLOADED
L2 QUE L1
L3 50 S L2

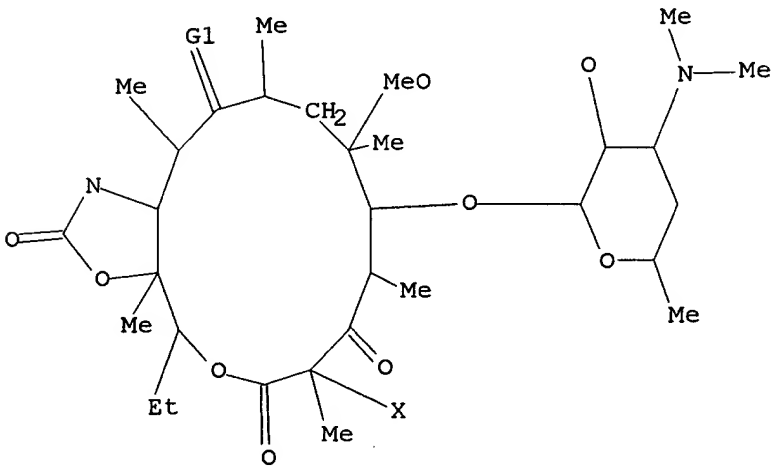
FILE 'STNGUIDE' ENTERED AT 18:45:54 ON 04 JAN 2001

FILE 'REGISTRY' ENTERED AT 18:50:18 ON 04 JAN 2001
L4 SCREEN 1821 OR 1822 OR 1823 OR 1824
L5 STRUCTURE UPLOADED
L6 QUE L5 AND L4 AND L4
L7 SCREEN 1821 OR 1822 OR 1823 OR 1824
L8 STRUCTURE UPLOADED
L9 QUE L8 AND L7 AND L7
L10 1 S L9
L11 32 S L9 SSS FUL

FILE 'CAPLUS' ENTERED AT 18:55:07 ON 04 JAN 2001
L12 11 S L11

=> d l9

L9 HAS NO ANSWERS
L7 SCR 1821 OR 1822 OR 1823 OR 1824
L8 STR



G1 O,N

Structure attributes must be viewed using STN Express query preparation.
L9 QUE ABB=ON PLU=ON L8 AND L7 AND L7

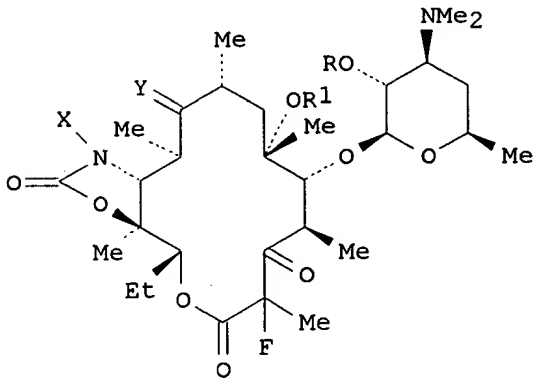
=> d bib abs hitstr l12 1-11

see 11 of 10

L12 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2001 ACS
AN 2000:680385 CAPLUS
DN 133:238249
TI Preparation of 2-halo-6-O-substituted erythromycin ketolides as antibacterial agents
IN Phan, Ly Tam; Or, Yat Sun; Chu, Daniel T.; Platter, Jacob J.; Chen, Yan; Clark, Richard F.
PA Abbott Laboratories, USA
SO U.S., 27 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6124269	A	20000926	US 1998-154294	19980916
PRAI US 1997-63700	19971029			

OS MARPAT 133:238249
GI



I

AB 2-Halo-6-O-substituted ketolide derivs. I (R = H, hydroxy protecting group; R1 = alkyl, aryl, heteroaryl, substituted amine, CH2CH:CHY, CH2C.tplbond.CY; Y = H, aryl, heteroaryl, vinyl, substituted vinyl; X = H, Y = O; XY = CH2CH2) and pharmaceutically acceptable salts and esters thereof having antibacterial activity having a formula STR1 compns. comprising a therapeutically effective amt. of a compd. of the invention in combination with a pharmaceutically acceptable carrier, a method for treating bacterial infections by administering to a mammal a pharmaceutical compn. contg. a therapeutically-effective amt. of a compd. of the invention, and processes for their prepn. Thus, I (R = X = H, R1 = CH2CH:CH2, Y = O) was prepd. and tested for its antibacterial activity (MIC = 0.003 to > 128).

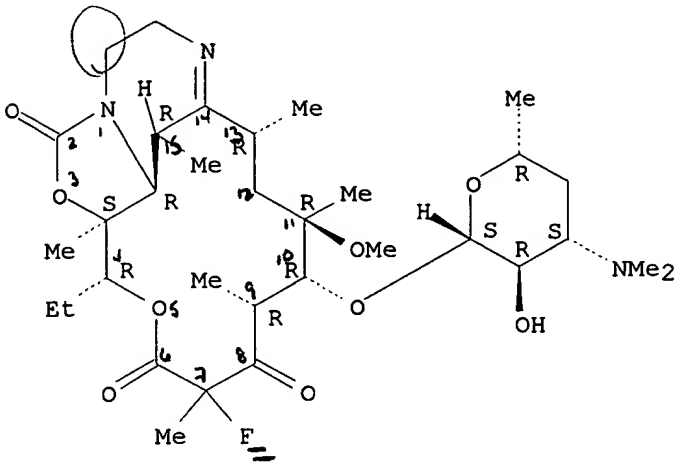
IT **223507-97-9P 223508-01-8P 223508-03-0P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 2-halo-6-O-substituted erythromycin ketolides as

antibacterial agents)

RN 223507-97-9 CAPLUS

CN 14,1-(Nitriloethano)-2H-oxacyclotetradecino[4,3-d]oxazole-2,6,8(7H,9H)-trione, 4-ethyl-7-fluoro-3a,4,10,11,12,13,15,15a-octahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

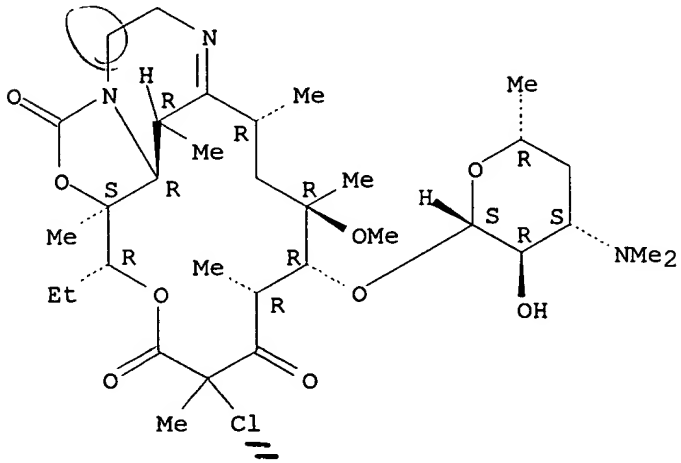
Absolute stereochemistry.



RN 223508-01-8 CAPLUS

CN 14,1-(Nitriloethano)-2H-oxacyclotetradecino[4,3-d]oxazole-2,6,8(7H,9H)-trione, 7-chloro-4-ethyl-3a,4,10,11,12,13,15,15a-octahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

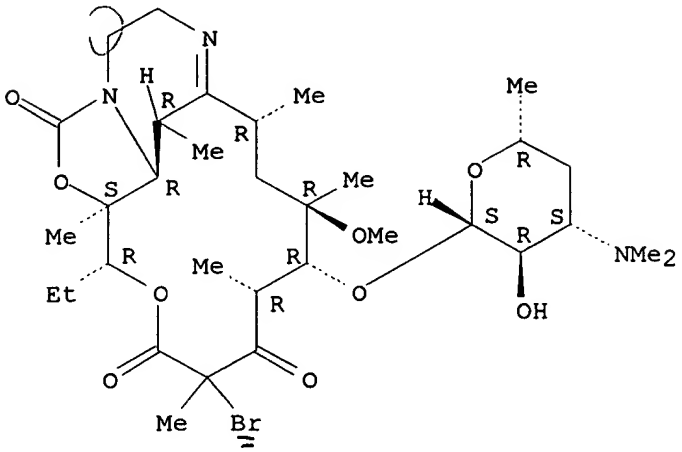


RN 223508-03-0 CAPLUS

CN 14,1-(Nitriloethano)-2H-oxacyclotetradecino[4,3-d]oxazole-2,6,8(7H,9H)-trione, 7-bromo-4-ethyl-3a,4,10,11,12,13,15,15a-octahydro-11-methoxy-

3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

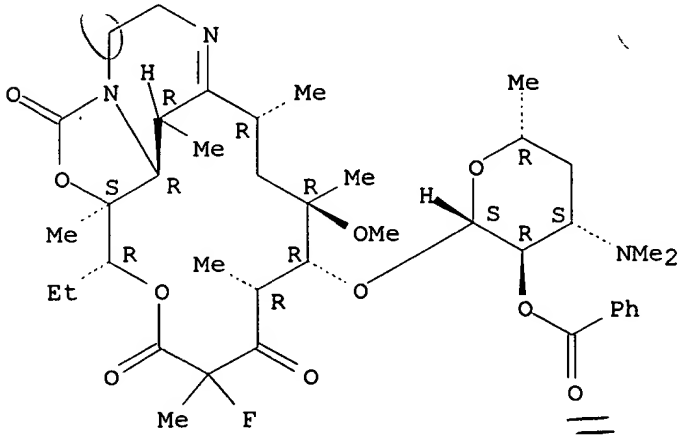


IT **223507-98-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of 2-halo-6-O-substituted erythromycin ketolides as antibacterial agents)

RN 223507-98-0 CAPLUS

CN 14,1-(Nitriloethano)-2H-oxacyclotetradecino[4,3-d]oxazole-2,6,8(7H,9H)-trione, 10-[[2-O-benzoyl-3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-4-ethyl-7-fluoro-3a,4,10,11,12,13,15,15a-octahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-, (3aS,4R,9R,10R,11R,13R,15R,15aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 14

RE

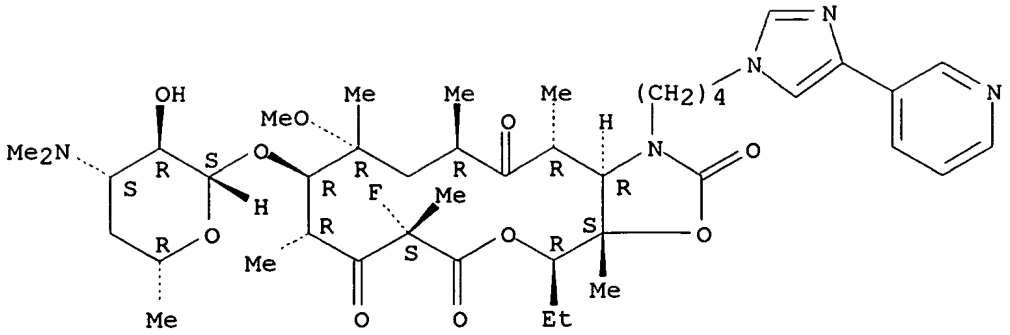
(1) Agouridas; US 5444051 1995 CAPLUS

(2) Agouridas; US 5747467 1998 CAPLUS

(3) Anon; WO 9209614 1992 CAPLUS
(4) Anon; EP 0596802 1994 CAPLUS
(5) Anon; FR 2742757 1997 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2001 ACS
AN 2000:595528 CAPLUS
DN 133:362896
TI .beta.-Keto-ester chemistry and ketolides. synthesis and antibacterial activity of 2-halo, 2-methyl and 2,3 enol-ether ketolides
AU Denis, A.; Bretin, F.; Fromentin, C.; Bonnet, A.; Piltan, G.; Bonnefoy, A.; Agouridas, C.
CS Medicinal Chemistry, Aventis Pharma, Romainville, 93235, Fr.
SO Bioorg. Med. Chem. Lett. (2000), 10(17), 2019-2022
CODEN: BMCLE8; ISSN: 0960-894X
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 133:362896
AB The effect of 2,3 modifications on the antibacterial activity of ketolides was evaluated by introducing substituents in position 2 and converting the C-1, C-2, C-3 .beta.-keto-ester into stable 2,3 enol-ether or 2,3 anhydro derivs. Introduction of a fluorine in C-2 is beneficial with regard to the overall antibacterial spectrum whereas the enol-ether and 2,3 unsatd. compds., as well as the bulky gem di-Me or 2-chloro derivs., are less active particularly against erythromycin resistant strains. A 2-fluoro ketolide deriv. demonstrates good antibacterial activity and in vivo efficacy against multi-resistant Streptococcus pneumoniae. Compared to azithromycin against Haemophilus influenzae, this compd. is equiv. in vitro and slightly more active in vivo. These results demonstrate that within the ketolide class, to retain good antibacterial activity, position 2 needs to remain tetrahedral and tolerates only very small substituents such as fluorine.
IT **193752-41-9P**, HMR 3562 **306770-55-8P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis and antibacterial activity of halo, Me and enol-ether ketolides)
RN 193752-41-9 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone, 4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-1-[4-[4-(3-pyridinyl)-1H-imidazol-1-yl]butyl]-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)-(9CI) (CA INDEX NAME)

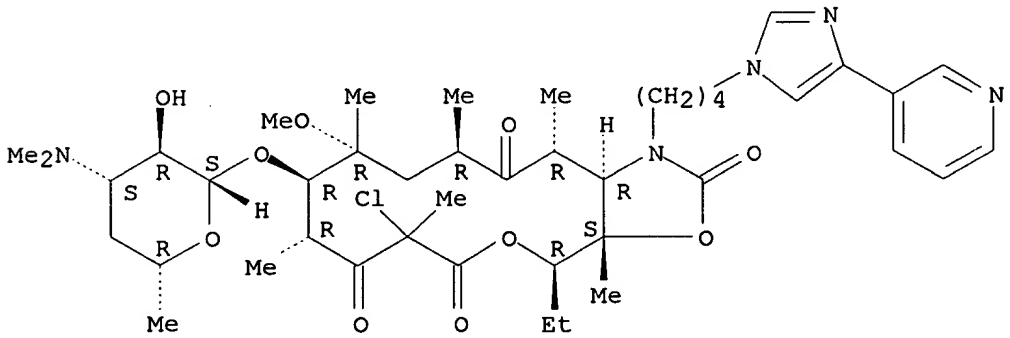
Absolute stereochemistry.



RN 306770-55-8 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone,

7-chloro-4-ethyloctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-1-[4-[4-(3-pyridinyl)-1H-imidazol-1-yl]butyl]-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,9R,10R,11R,13R,15R,15aR)-
(9CI)
(CA INDEX NAME)

Absolute stereochemistry.



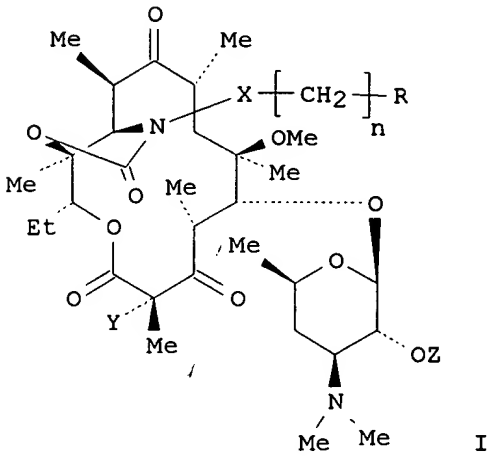
RE.CNT 9
RE
(1) Agouridas, C; J Med Chem 1998, V41, P4080 CAPLUS
(2) Bonnefoy, A; J Antimicrob Chemother 1997, V40, P85 CAPLUS
(3) Denis, A; Bioorg Med Chem Lett 1999, V9, P3075 CAPLUS
(4) Elliott, R; J Med Chem 1998, V41, P1651 CAPLUS
(7) Or, Y; WO 9809978 A1 1998 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2001 ACS
AN 2000:553251 CAPLUS
DN 133:120575
TI Preparation of erythromycins as antibacterial agents
IN Denis, Alexis; Fromentin, Claude; Heckmann, Bertrand
PA Hoechst Marion Roussel, Fr.
SO Eur. Pat. Appl., 17 pp.
CODEN: EPXXDW
DT Patent

LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1026170	A1	20000809	EP 2000-400286	20000203
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2789392	A1	20000811	FR 1999-1292	19990204
	JP 2000229993	A2	20000822	JP 2000-21454	20000131
PRAI	FR 1999-1292	19990204			

OS MARPAT 133:120575
GI



I

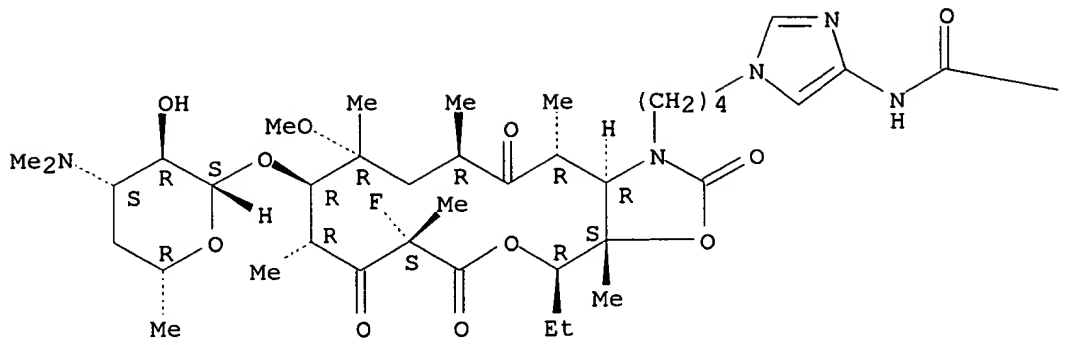
AB Macrolide erythromycins I (R = heterocycle,X = CH2, NH; n = 1-8; Y = H, halogen; Z = H, acyl) were prepd. as antibacterial agents. Thus, 11,12-dideoxy-3-de[(2,6-dideoxy-3-C-methyl-3-O-methyl-.alpha.-L-ribo-hexopyranosyl)oxy]-6-O-methyl-3-oxo-12,11-[oxycarbonyl[[4-[4-(1H-indol-3-yl)-1H-imidazol-1-yl]-butyl]-imino]]-erythromycin was prepd. and tested in vitro for its antibacterial activity (MIC for S. aureus = 0.02-0.150 .mu.g/cm3).

IT **285569-19-9P 285569-47-3P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of erythromycins as antibacterial agents)

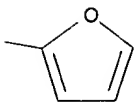
RN 285569-19-9 CAPLUS
CN 2-Furancarboxamide,
N-[1-[4-[(3aS,4R,7S,9R,10R,11R,13R,15R,15aR)-4-ethyl-7-fluorododecahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-2,6,8,14-tetraoxo-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-2H-oxacyclotetradecino[4,3-d]oxazol-1(4H)-yl]butyl]-1H-imidazol-4-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

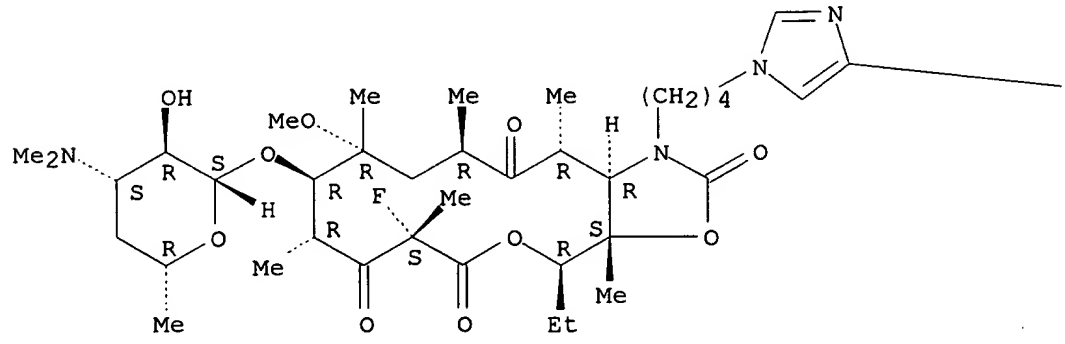


RN 285569-47-3 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone,

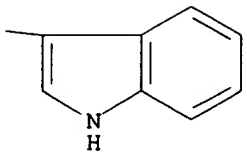
4-ethyl-7-fluorooctahydro-1-[4-[4-(1H-indol-3-yl)-1H-imidazol-1-yl]butyl]-11-methoxy-3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



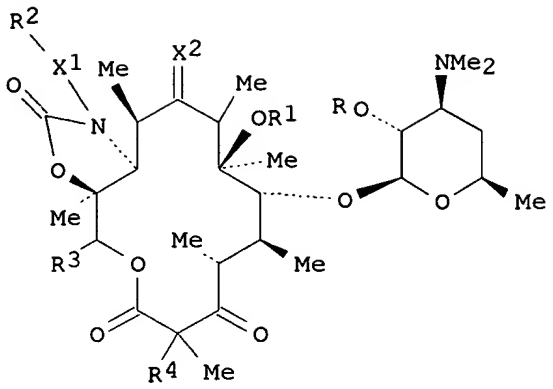
RE.CNT 5
RE
(1) Roussel, U; EP 0676409 A 1995 CAPLUS
(2) Roussel, U; EP 0680967 A 1995 CAPLUS
(3) Roussel, U; FR 2732023 A 1996 CAPLUS
(4) Roussel, U; FR 2732684 A 1996 CAPLUS
(5) Roussel, U; EP 0799833 A 1997 CAPLUS

L12 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2001 ACS
AN 2000:535153 CAPLUS
DN 133:135545
TI Preparation of ketolide antibiotics erythromycin derivatives as antibacterial and antiprotozoal agents
IN Kaneko, Takushi; McMillen, William Thomas
PA Pfizer Products Inc., USA
SO PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

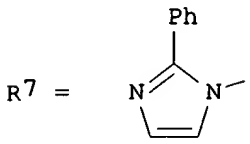
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000044761	A2	20000803	WO 1999-IB2051	19991228

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-117342 19990127
OS MARPAT 133:135545
GI



I



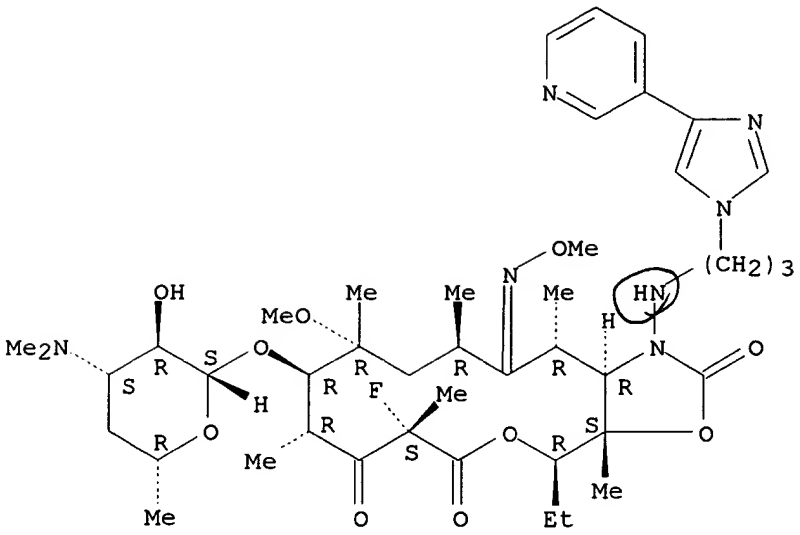
AB Macrolide erythromycins I (R = H,acyl, Bn, benzyloxycarbonyl, alkylsilyl; R1 = alkyl; R2 = heterocycle, aryl; R3 = H, alkyl; R4 = halogen, CN; X1 = O, -CR5R6-, -NR5-; R5, R6 = H, alkyl; X2 = O, substituted oxime) were prepd. as antibacterial and antiprotozoal agents. Thus, I (R = H; R1 = Me; R2 = NH(CH2)3R7; R3 = Et, R4 = F) was prepd. and tested in mice for its antibacterial and antiprotozoal activities.

IT **286462-85-9P 286462-86-0P 286462-87-1P**
286462-88-2P 286462-89-3P 286462-90-6P
286462-92-8P 286462-94-0P 286462-96-2P
286462-98-4P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of ketolide antibiotics erythromycin derivs. as antibacterial and antiprotozoal agents)

RN 286462-85-9 CAPLUS

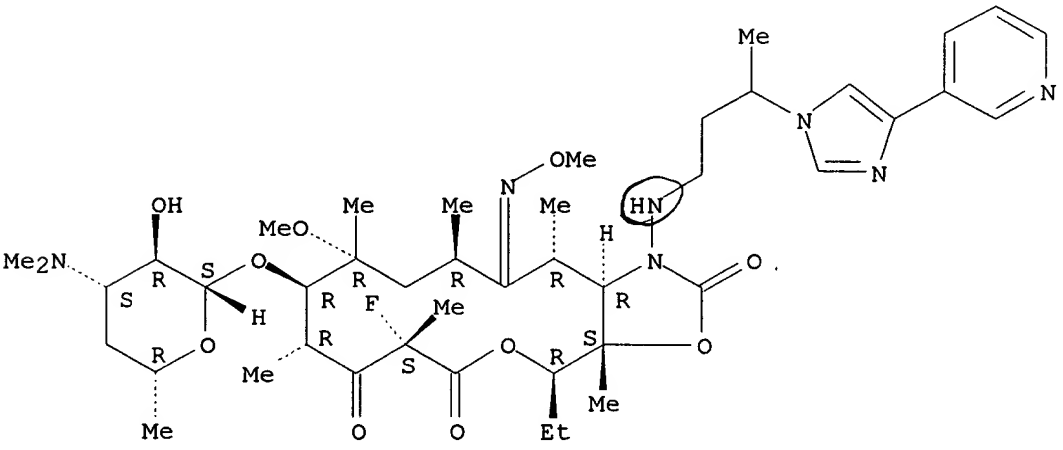
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone, 4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-1-[[3-[4-(3-pyridinyl)-1H-imidazol-1-yl]propyl]amino]-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, 14-(O-methyloxime), (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



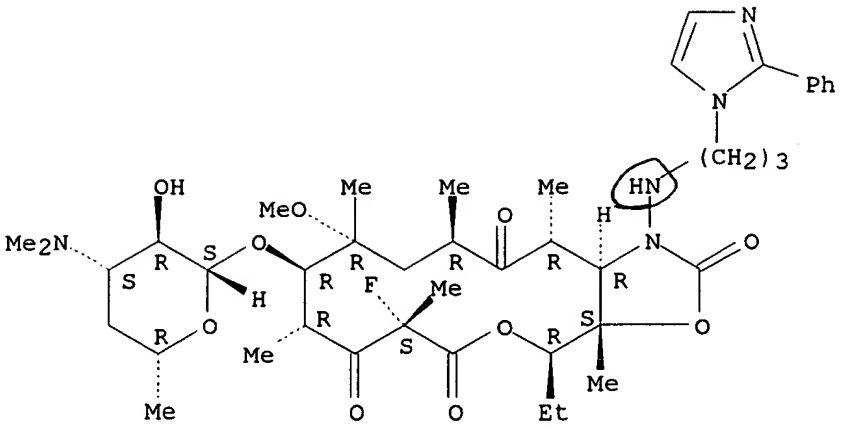
RN 286462-86-0 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone, 4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-1-[[3-[4-(3-pyridinyl)-1H-imidazol-1-yl]butyl]amino]-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, 14-(O-methyloxime), (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



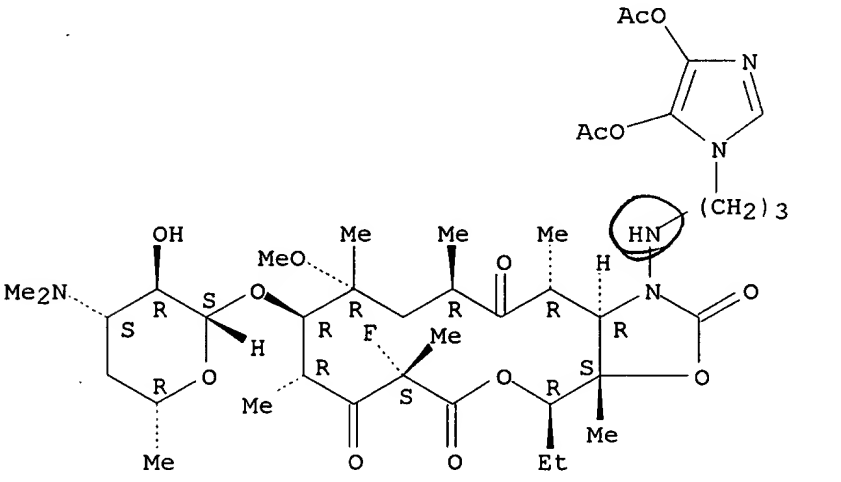
RN 286462-87-1 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone, 4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-1-[[3-(2-phenyl-1H-imidazol-1-yl)propyl]amino]-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



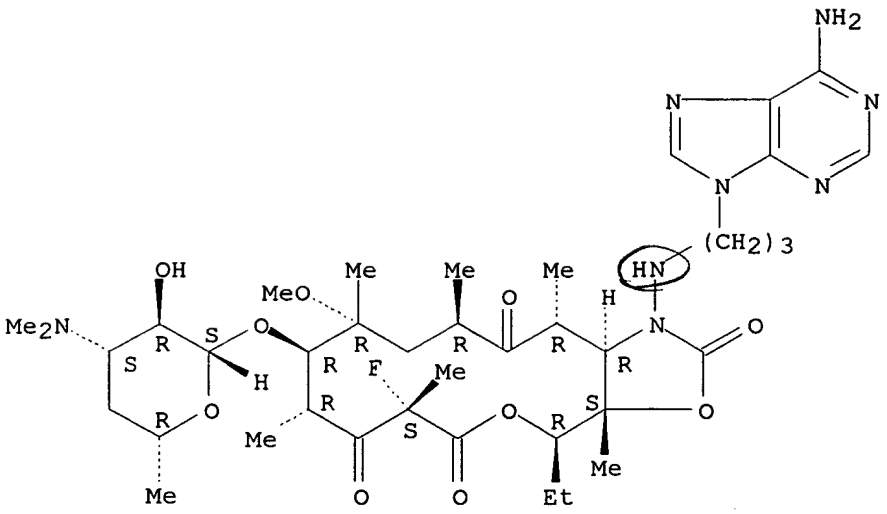
RN 286462-88-2 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone, 1-[[3-[4,5-bis(acetyloxy)-1H-imidazol-1-yl]propyl]amino]-4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



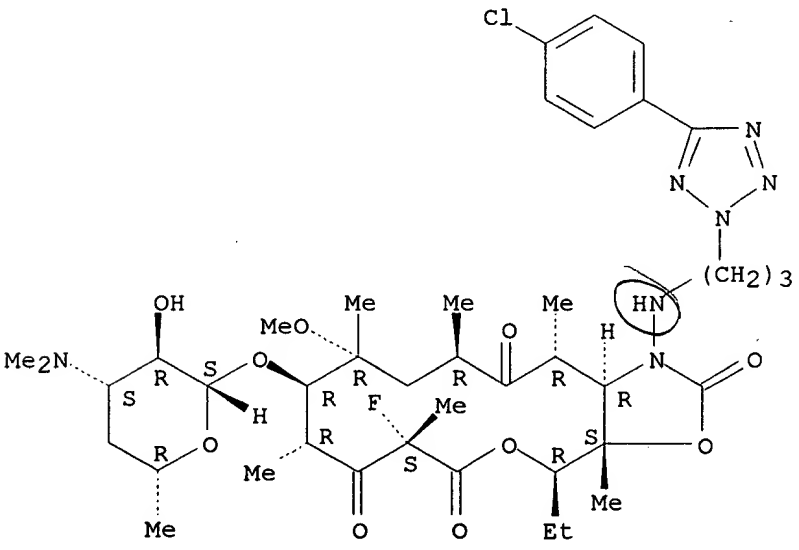
RN 286462-89-3 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone, 1-[[3-(6-amino-9H-purin-9-yl)propyl]amino]-4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



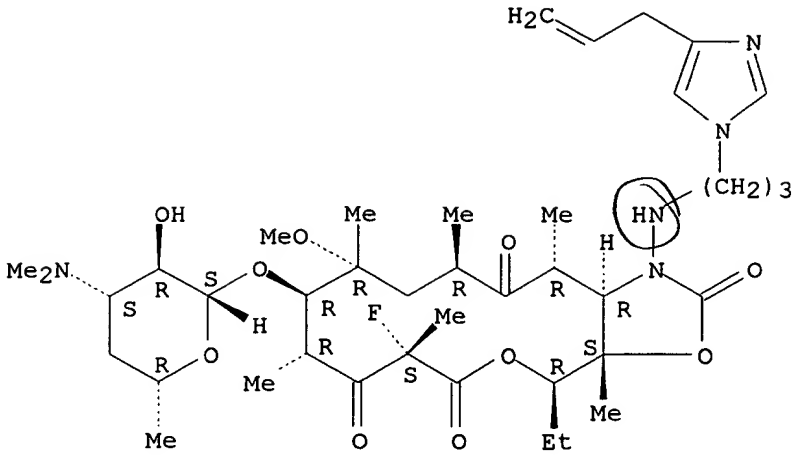
RN 286462-90-6 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone, 1-[[3-[5-(4-chlorophenyl)-2H-tetrazol-2-yl]propyl]amino]-4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



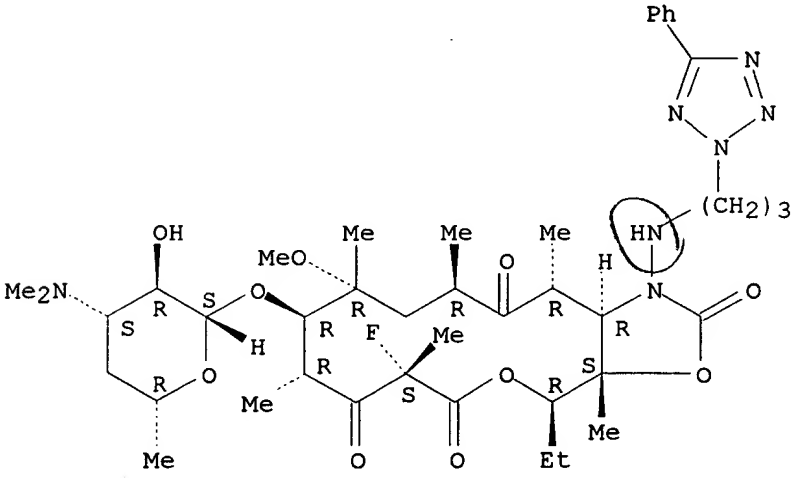
RN 286462-92-8 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone, 4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-1-[[3-[4-(2-propenyl)-1H-imidazol-1-yl]propyl]amino]-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



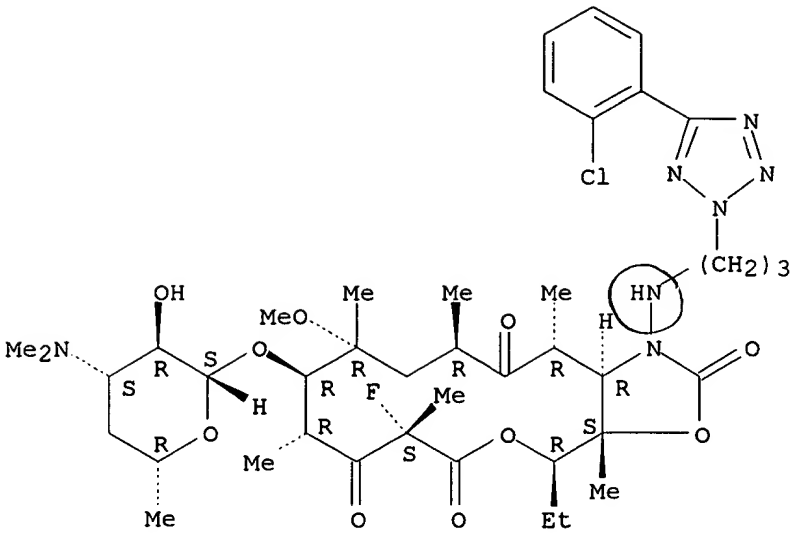
RN 286462-94-0 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone, 4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-1-[[3-(5-phenyl-2H-tetrazol-2-yl)propyl]amino]-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



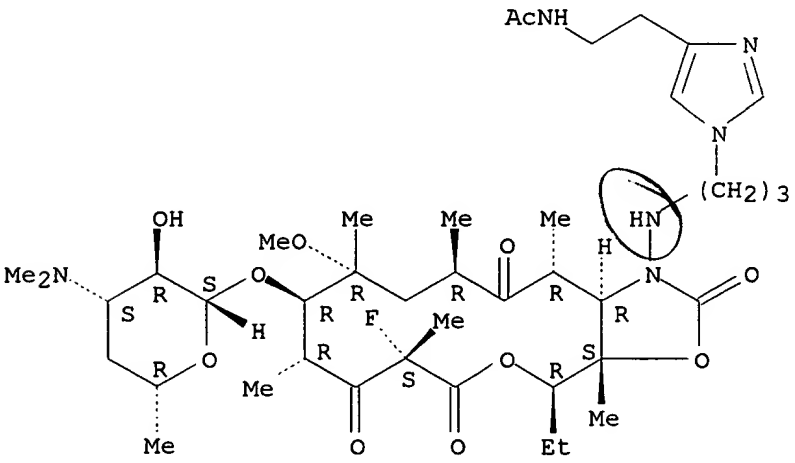
RN 286462-96-2 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone, 1-[[3-[5-(2-chlorophenyl)-2H-tetrazol-2-yl]propyl]amino]-4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 286462-98-4 CAPLUS
CN Acetamide, N-[2-[1-[3-[[(3aS,4R,7S,9R,10R,11R,13R,15R,15aR)-4-ethyl-7-fluorododecahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-2,6,8,14-tetraoxo-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-2H-oxacyclotetradecino[4,3-d]oxazol-1(4H)-yl]amino]propyl]-1H-imidazol-4-yl]ethyl]- (9CI) (CA INDEX NAME)

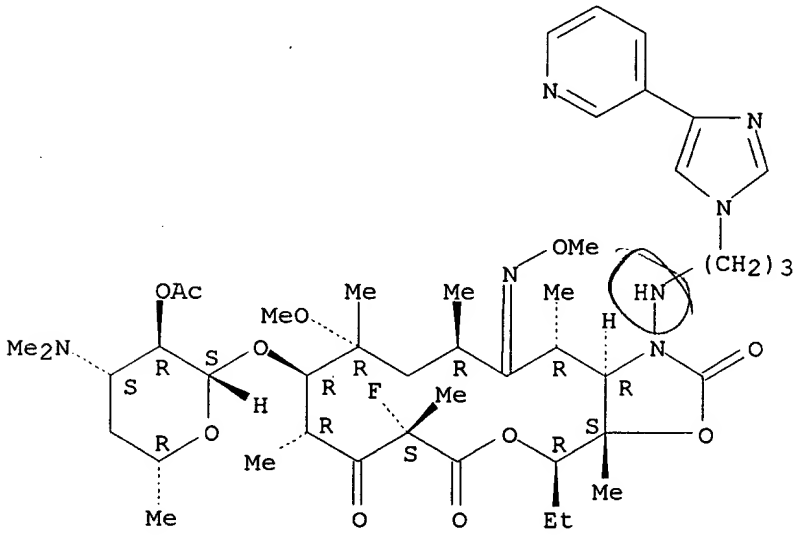
Absolute stereochemistry.



IT **286463-00-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of ketolide antibiotics erythromycin derivs. as antibacterial and antiprotozoal agents)
RN 286463-00-1 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone,

10-[[2-O-acetyl-3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-1-[[3-[4-(3-pyridinyl)-1H-imidazol-1-yl]propyl]amino]-, 14-(O-methyloxime), (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

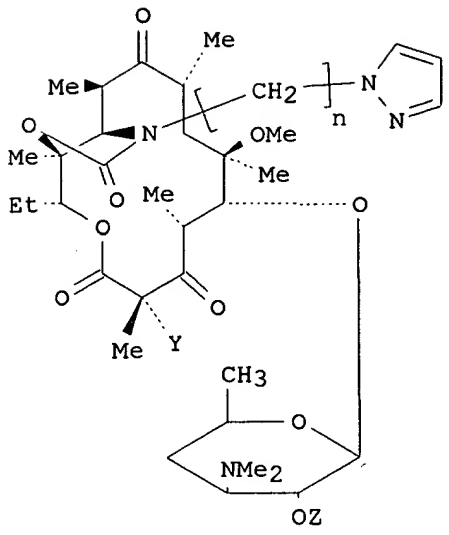
Absolute stereochemistry.
Double bond geometry unknown.



L12 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2001 ACS
AN 2000:367056 CAPLUS
DN 133:4901
TI Preparation of erythromycins as antibacterial agents
IN Denis, Alexis
PA Hoechst Marion Roussel, Fr.
SO Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1004592	A1	20000531	EP 1999-402907	19991123
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2786188	A1	20000526	FR 1998-14782	19981124
	AU 9959522	A1	20000525	AU 1999-59522	19991117
	JP 2000159790	A2	20000613	JP 1999-331141	19991122
	NO 9905745	A	20000525	NO 1999-5745	19991123
	CN 1263101	A	20000816	CN 1999-127394	19991123
	BR 9905735	A	20000808	BR 1999-5735	19991124
PRAI	FR 1998-14782	19981124			

OS MARPAT 133:4901
GI



I

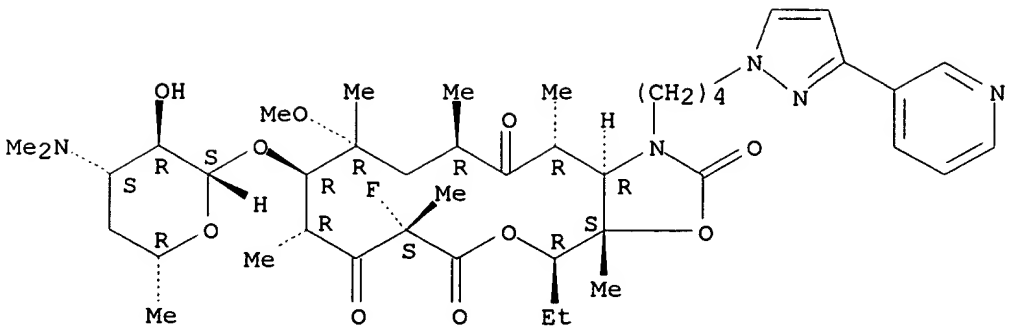
AB Macrolide erythromycins I (Y =H, F; n = 1-8; Z = H, substituted carboxylate) were prepd. as antibacterial agents. Thus, 11,12-dideoxy-3-de[(2,6-dideoxy-3-C-methyl-3-O-methyl-.alpha.-L-ribohexopyranosyl)oxy]-6-O-methyl-3-oxo-12,11-[oxycarbonyl[[4-[3-(3-pyridinyl)-1H-pyrazol-1-yl]butyl]imino]]-erythromycin was prepd. and tested in vitro for its antibacterial activity (MIC = 0.04-0.6 .mu./CM3).

IT **270251-28-0P 270251-31-5P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(derivs. of erythromycin, their process of prepn. and their application as medicaments)

RN 270251-28-0 CAPLUS

CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone, 4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-1-[4-[3-(3-pyridinyl)-1H-pyrazol-1-yl]butyl]-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)-(9CI) (CA INDEX NAME)

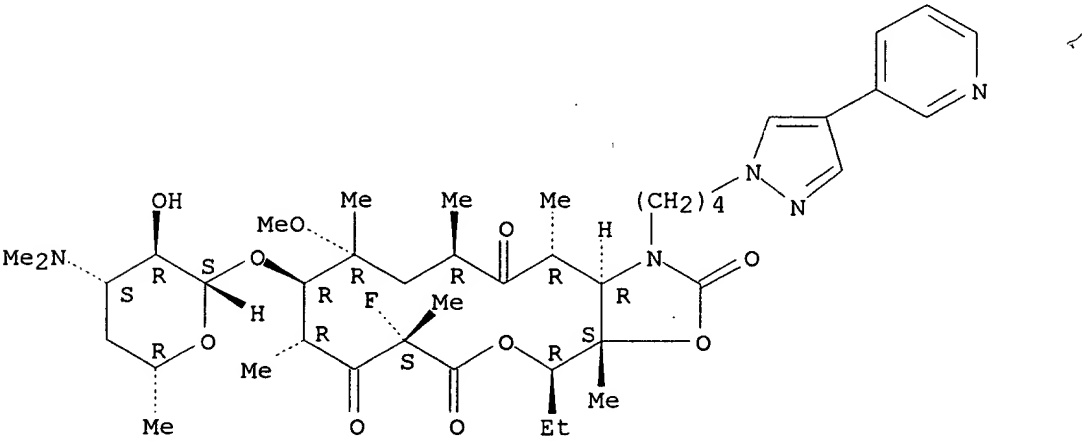
Absolute stereochemistry.



RN 270251-31-5 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone,

4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-1-[4-[4-(3-pyridinyl)-1H-pyrazol-1-yl]butyl]-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



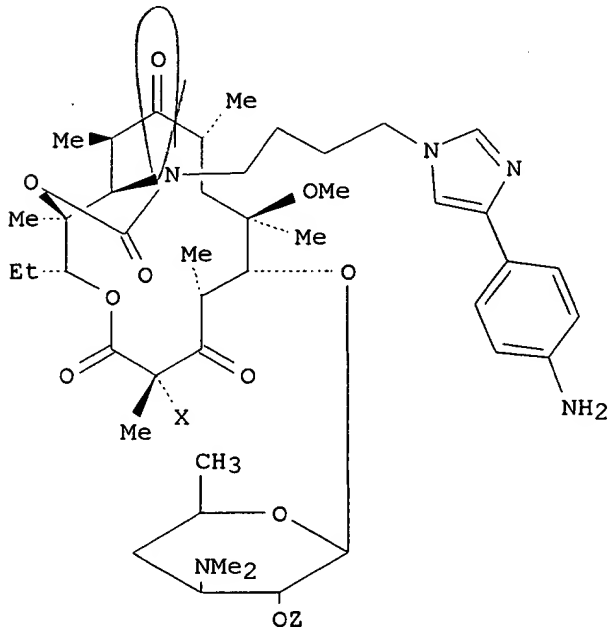
RE.CNT 8
RE
(1) Ferroni, R; Arzneim Forsch 1990, V40(6), P705 CAPLUS
(2) Fujisawa Pharm Co Ltd; JP 04234891 A 1992 CAPLUS
(4) Pomarnacka, E; Acta Pol Pharm 1985, V42(3), P236 CAPLUS
(5) Sterling Drug Inc; DE 2756852 A 1978 CAPLUS
(6) Uclaf, R; EP 0596802 A 1994 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2001 ACS
AN 2000:335421 CAPLUS
DN 132:322074
TI Preparation of erythromycin derivatives as antibiotics
IN Agouridas, Constantin; Denis, Alexis; Fromentin, Claude
PA Hoechst Marion Roussel, Fr.

SO PCT Int. Appl., 13 pp.
CODEN: PIXXD2
DT Patent
LA French
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000027857	A2	20000518	WO 1999-FR2718	19991109
WO 2000027857	A3	20000817		
W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CR, CU, CZ, DM, EE, GD, GE, HR, HU, ID, IL, IN, IS, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2785612	A1	20000512	FR 1998-14145	19981110
JP 2000143689	A2	20000526	JP 1999-318015	19991109
EP 1016669	A1	20000705	EP 1999-402783	19991109
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRAI FR 1998-14145 19981110
OS MARPAT 132:322074
GI



I

AB Erythromycin derivs. I, wherein X represents a hydrogen atom or a halogen atom and Z represents a hydrogen atom or an acid radical and the additive salts with acids were prepd. as antibiotics. Thus, 11,12-dideoxy-3-de-[(2,6-dideoxy-3-C-methyl-3-O-methyl-.alpha.-L-ribohexopyranosyl)oxy]-6-O-methyl-3-oxo-12,11-[oxycarbonyl-[[4-[4-(4-aminophenyl)-1H-imidazol-1-yl]butyl]imino]]-erythromycin was prepd. and tested in vitro for its antibacterial activity against Streptococcus pyogenes and pneumoniae (MIC = 0.3-2.5 .mu.g/CM3).

IT **267000-51-1P**

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of erythromycin derivs. as antibiotics)

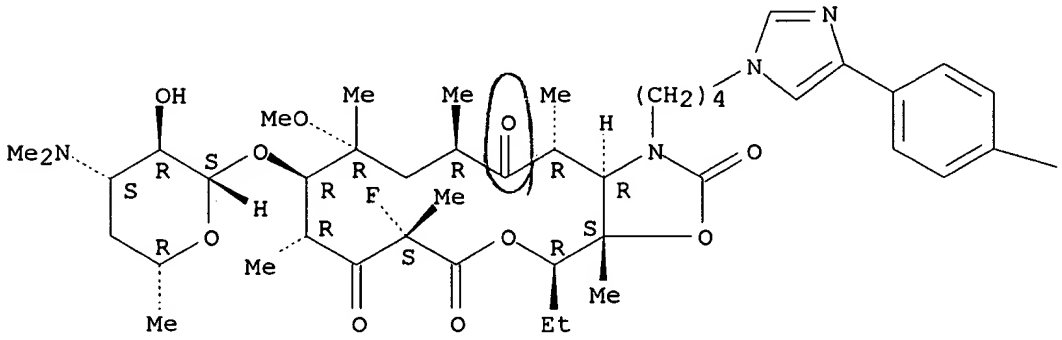
RN 267000-51-1 CAPLUS

CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone,

1-[4-[4-(4-aminophenyl)-1H-imidazol-1-yl]butyl]-4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

—NH_2

IT **267000-52-2P**

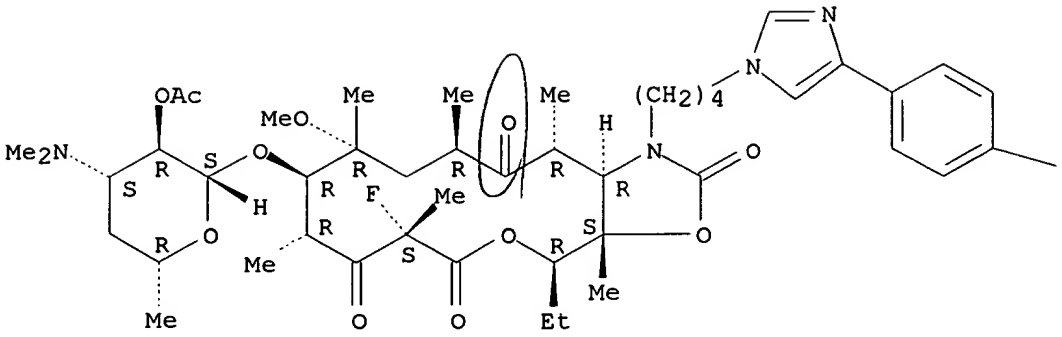
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of erythromycin derivs. as antibiotics)

RN 267000-52-2 CAPLUS

CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone, 10-[[2-O-acetyl-3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-1-[4-[4-(4-aminophenyl)-1H-imidazol-1-yl]butyl]-4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

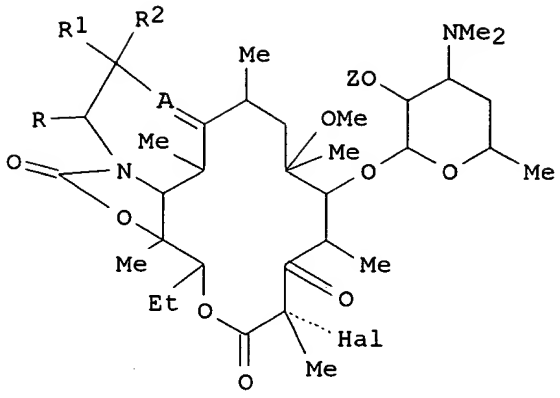
L12 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2001 ACS
AN 2000:289282 CAPLUS
DN 132:279475
TI Preparation of macrolide erythromycins as antibacterial agents
IN Agouridas, Constantin; Bretin, Francois; Denis, Alexis; Fromentin, Claude
PA Hoechst Marion Roussel, Fr.
SO Fr. Demande, 28 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2784682	A1	20000421	FR 1998-12937	19981015
	JP 2000128896	A2	20000509	JP 1999-290869	19991013
	EP 1000952	A2	20000517	EP 1999-402523	19991014

R: AT, BE, CH, DE, DK, ES, FR, GB, GR; IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRAI FR 1998-12937 19981015
OS MARPAT 132:279475
GI

Applicants



I

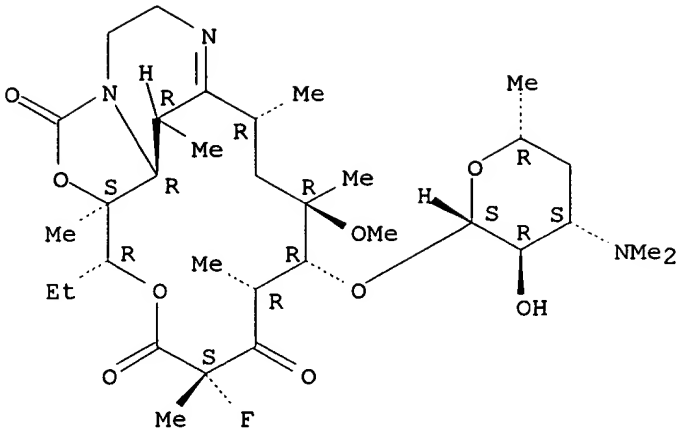
AB Macrolide erythromycins I (A = N, NO; R = H, hydroxyalkyl, aryloxyalkyl; R1 and R2 = H, alkyl; Z = H, acyl) were prepd. as antibacterial agents. Thus, [3aS-(3aR*,4S*,7R*,9S*,10S*,11S*,13S*,15S*,15aS*)]-4-ethyl-7-fluoro-3a,4,10,11,12,13,15,15a-octahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethyl-amino)-.beta.-D-xylo-hexopyranosyl]oxy]-14,1-(nitriloethano)-2H-oxacyclotetradecino[4,3-d]oxazole-2,6,8(9H)-trione was prepd. and tested in vitro for its antibacterial activity (MIC = 0.02-1.2 .mu.g/cm3).

IT **263904-89-8P 263904-92-3P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of macrolide erythromycins as antibacterial agents)

RN 263904-89-8 CAPLUS

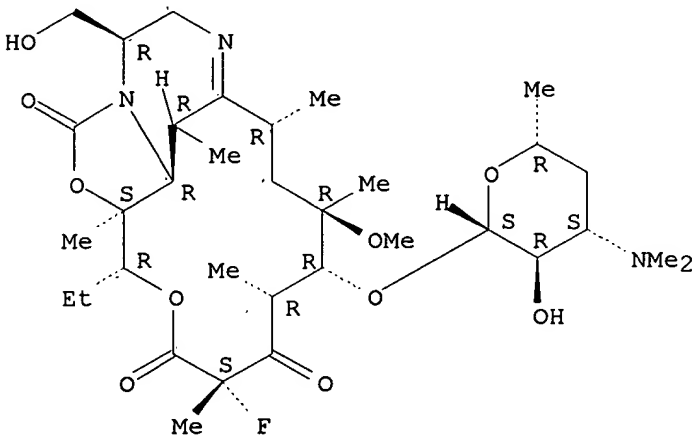
CN 14,1-(Nitriloethano)-2H-oxacyclotetradecino[4,3-d]oxazole-2,6,8(7H,9H)-trione, 4-ethyl-7-fluoro-3a,4,10,11,12,13,15,15a-octahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



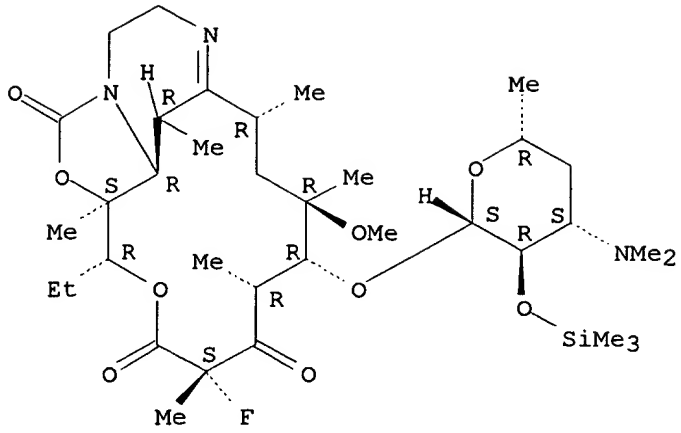
RN 263904-92-3 CAPLUS
CN 14,1-(Nitriloethano)-2H-oxacyclotetradecino[4,3-d]oxazole-2,6,8(7H,9H)-trione, 4-ethyl-7-fluoro-3a,4,10,11,12,13,15,15a-octahydro-18-(hydroxymethyl)-11-methoxy-3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR,18R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



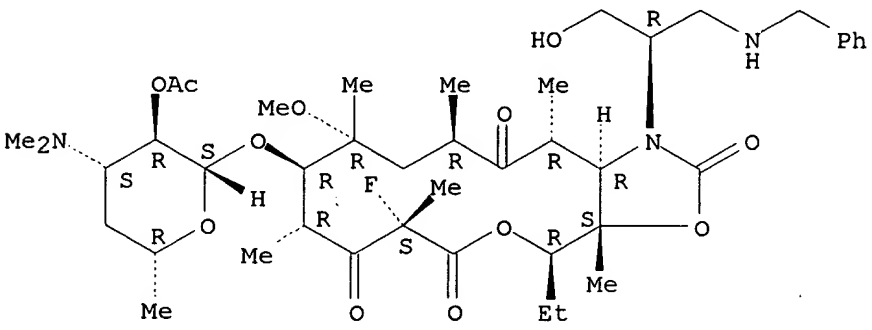
IT **263904-91-2P 263904-95-6P 263904-99-0P 263905-00-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of macrolide erythromycins as antibacterial agents)
RN 263904-91-2 CAPLUS
CN 14,1-(Nitriloethano)-2H-oxacyclotetradecino[4,3-d]oxazole-2,6,8(7H,9H)-trione, 4-ethyl-7-fluoro-3a,4,10,11,12,13,15,15a-octahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-2-O-(trimethylsilyl)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



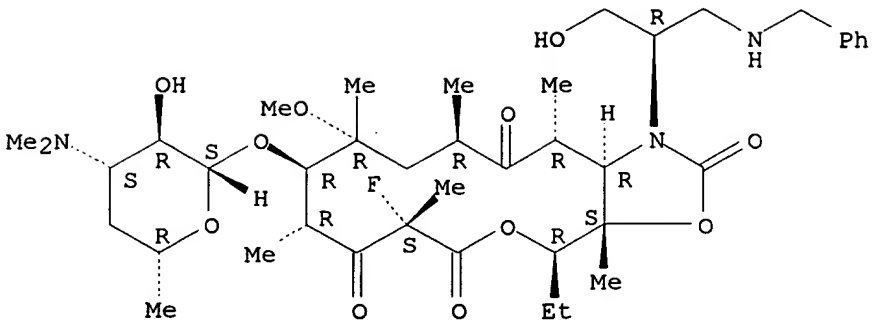
RN 263904-95-6 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone, 10-[[2-O-acetyl-3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-4-ethyl-7-fluorooctahydro-1-[(1R)-1-(hydroxymethyl)-2-[(phenylmethyl)amino]ethyl]-11-methoxy-3a,7,9,11,13,15-hexamethyl-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



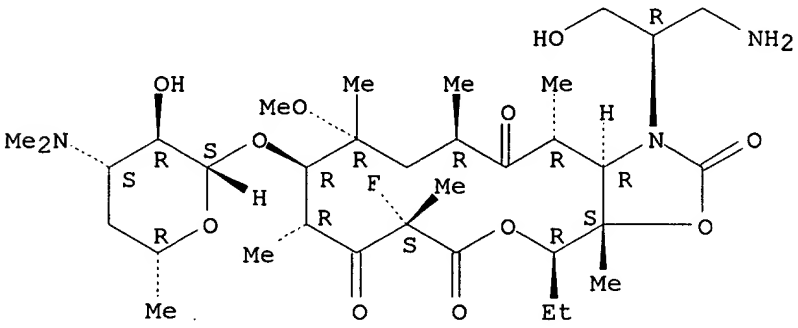
RN 263904-99-0 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone, 4-ethyl-7-fluorooctahydro-1-[(1R)-1-(hydroxymethyl)-2-[(phenylmethyl)amino]ethyl]-11-methoxy-3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 263905-00-6 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone, 1-[(1R)-2-amino-1-(hydroxymethyl)ethyl]-4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)-(9CI) (CA INDEX NAME)

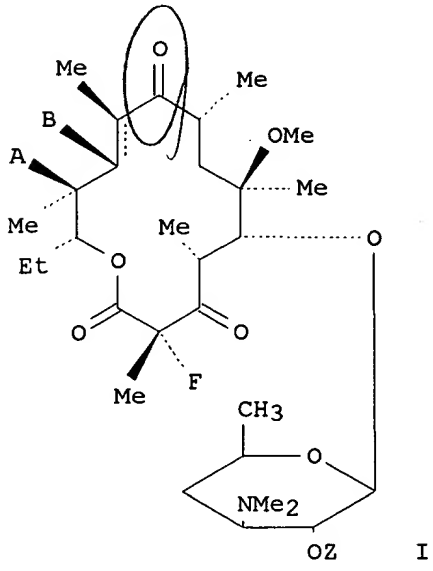
Absolute stereochemistry.



L12 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2001 ACS
AN 1999:659085 CAPLUS
DN 131:257819
TI Preparation of 2-fluoro-3-de[(2,6-dideoxy-3-C-methyl-3-O-methyl-.alpha.-L-ribohexopyranosyl)oxy]-6-O-methyl-3-oxo-erythromycin derivatives
IN Bonnet, Alain; Gambier, Francoise
PA Hoechst Marion Roussel, Fr.
SO Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DT Patent
LA French
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 949268	A1	19991013	EP 1999-400843	19990407
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2777282	A1	19991015	FR 1998-4366	19980408
US 6121432	A	20000919	US 1999-273846	19990322
JP 11310591	A2	19991109	JP 1999-88580	19990330

CN 1235162 A 19991117 CN 1999-104863 19990407
PRAI FR 1998-4366 19980408
OS MARPAT 131:257819
GI



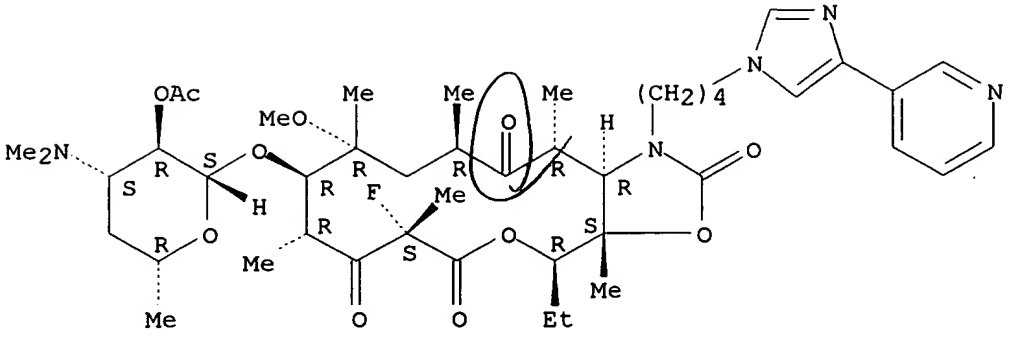
I

AB Macrolide erythromycins I (A = OH; B = H; AB = carbonate, carbamate; Z = H, acyl, alkyl) were prepd. Thus, 11,12-dideoxy-3-de[(2,6-dideoxy-3-C-methyl-3-O-methyl-.alpha.-L-ribohexopyranosyl)oxy]-2.alpha.-fluoro-6-O-methyl-3-oxo-12,11-[oxycarbonyl[4-[-(3-pyridinyl)-1H-imidazol-1-yl]-butyl]imino]erythromycin A was prepd.

IT **244307-90-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of 2-fluoro-3-de[(2,6-dideoxy-3-C-methyl-3-O-methyl-.alpha.-L-ribohexopyranosyl)oxy]-6-O-methyl-3-oxo-erythromycin derivs.)

RN 244307-90-2 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone, 10-[[2-O-acetyl-3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-1-[4-[4-(3-pyridinyl)-1H-imidazol-1-yl]butyl]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

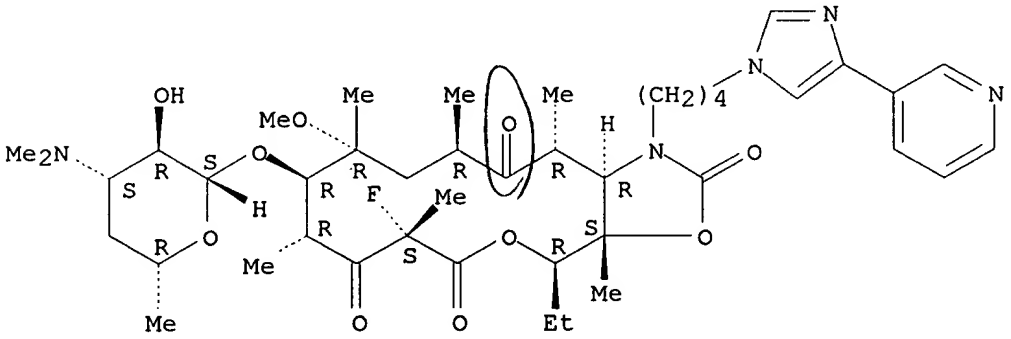
Absolute stereochemistry.



IT **193752-41-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of 2-fluoro-3-de[(2,6-dideoxy-3-C-methyl-3-O-methyl-.alpha.-L-ribohexopyranosyl)oxy]-6-O-methyl-3-oxo-erythromycin derivs.)
RN 193752-41-9 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone,

4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-1-[4-[4-(3-pyridinyl)-1H-imidazol-1-yl]butyl]-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 3
RE
(1) Griesgraber, G; JOURNAL OF ANTIBIOTICS 1996, V49(5), P465 CAPLUS
(2) Roussel, U; EP 0487411 A 1992 CAPLUS
(3) Roussel, U; EP 0799833 A 1997 CAPLUS

L12 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2001 ACS
AN 1999:344856 CAPLUS
DN 131:707
TI Use of ketolides for prevention of arterial thrombotic complications related to atherosclerosis
IN Petit, Francis; Vacheron, Francoise
PA Hoechst Marion Roussel, Fr.
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2

DT Patent
LA French
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9925365	A1	19990527	WO 1998-FR2436	19981116
W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GD, GE, HR, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2771008	A1	19990521	FR 1997-14358	19971117
FR 2771008	B1	20000428		
AU 9912425	A1	19990607	AU 1999-12425	19981116
EP 1030673	A1	20000830	EP 1998-955662	19981116
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO				
BR 9814199	A	20000926	BR 1998-14199	19981116
NO 2000002435	A	20000707	NO 2000-2435	20000511
PRAI FR 1997-14358	19971117			
WO 1998-FR2436	19981116			

OS MARPAT 131:707

AB The invention concerns a therapeutic application of ketolides for prepg. pharmaceutical compns. for preventing arterial thrombotic complications related to atherosclerosis.

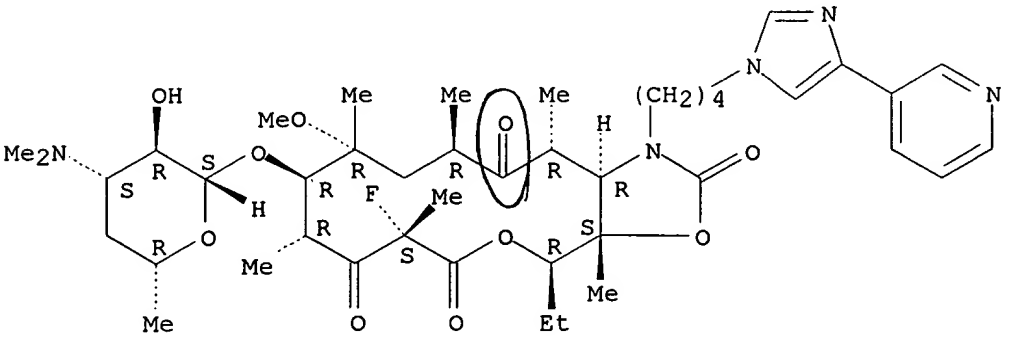
IT **193752-41-9**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ketolides for prevention of arterial thrombotic complications related to atherosclerosis)

RN 193752-41-9 CAPLUS

CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone,

4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-1-[4-[4-(3-pyridinyl)-1H-imidazol-1-yl]butyl]-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



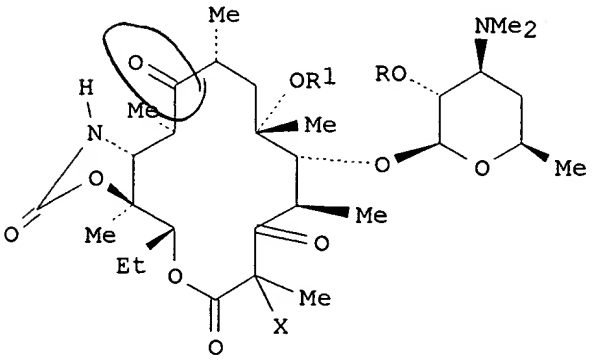
RE.CNT 4
RE

(1) Cronberg, S; FOLIA HAEMATOL 1984, V111(6), P725 CAPLUS
(2) Johnsson, H; THROMB RES 1977, V11(2), P237 CAPLUS
(3) Roussel-Uclaf; EP 0676409 A 1995 CAPLUS
(4) Roussel-Uclaf; EP 0680967 A 1995 CAPLUS

L12 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2001 ACS
AN 1999:299484 CAPLUS
DN 130:312023
TI Preparation of 2-halo-6-O-substituted ketolide erythromycins as antibacterial agents
IN Phan, Ly Tam; Or, Yat Sun; Chu, Daniel T.; Plattner, Jacob J.; Chen, Yan; Clark, Richard F.
PA Abbott Laboratories, USA
SO PCT Int. Appl., 73 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9921871	A1	19990506	WO 1998-US22989	19981029
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	ZA 9809845	A	19990429	ZA 1998-9845	19981028
	AU 9912881	A1	19990517	AU 1999-12881	19981029
	EP 1027362	A1	20000816	EP 1998-956338	19981029
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, FI, RO				
	BR 9813319	A	20000822	BR 1998-13319	19981029
	NO 2000002190	A	20000629	NO 2000-2190	20000427
PRAI	US 1997-959881		19971029		
	US 1998-154239		19980916		
	WO 1998-US22989		19981029		

OS MARPAT 130:312023
GI



I

AB Macrolide erythromycins I (R is hydrogen or a hydroxy protecting group; R1
= alkyl optionally substituted with one or more substituents, ; X is F, Cl, Br, I;CH2CH:CHY, wherein Y is selected from the group consisting of H,
aryl, heteroaryl, -CH:CH2, CH:CH-aryl, CH:CH-heteroaryl, and aryloyl) were
prepd. as antibacterial agents. Thus, I (R = H, R1 = CH2CH:CH2, X = F)
was prepd. and tested for its antibacterial activity (MICs = 0.2-100
.mu.g/mL).

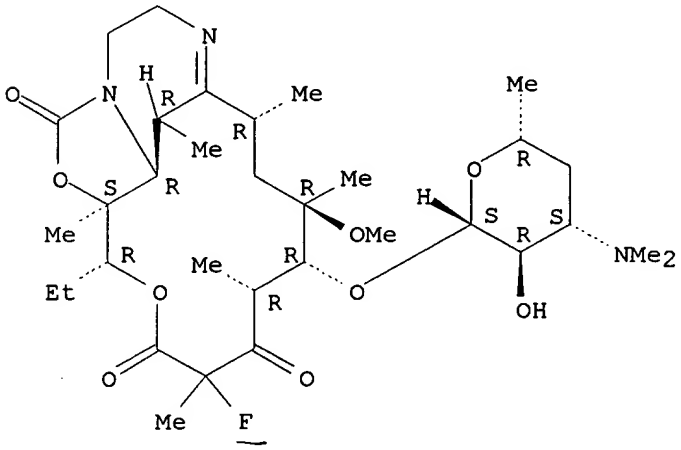
IT **223507-97-9P 223508-01-8P 223508-03-0P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 2-halo-6-O-substituted ketolide erythromycins as antibacterial agents)

RN 223507-97-9 CAPLUS

CN 14,1-(Nitriloethano)-2H-oxacyclotetradecino[4,3-d]oxazole-2,6,8(7H,9H)-trione, 4-ethyl-7-fluoro-3a,4,10,11,12,13,15,15a-octahydro-11-methoxy-

3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

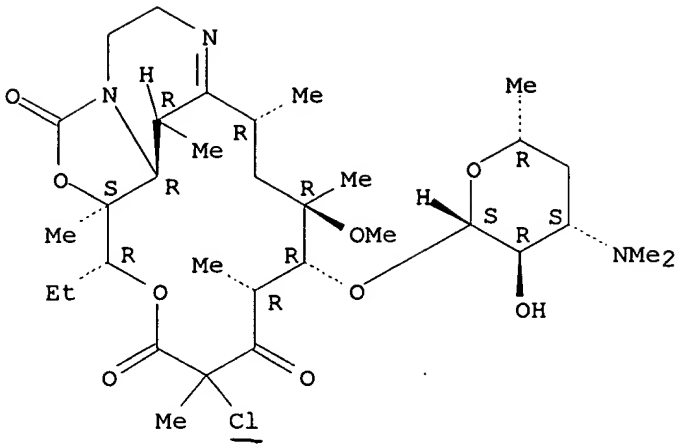


RN 223508-01-8 CAPLUS

CN 14,1-(Nitriloethano)-2H-oxacyclotetradecino[4,3-d]oxazole-2,6,8(7H,9H)-trione, 7-chloro-4-ethyl-3a,4,10,11,12,13,15,15a-octahydro-11-methoxy-

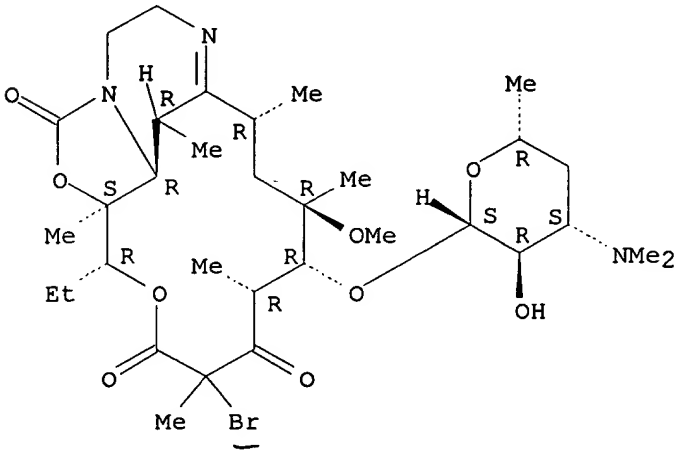
3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



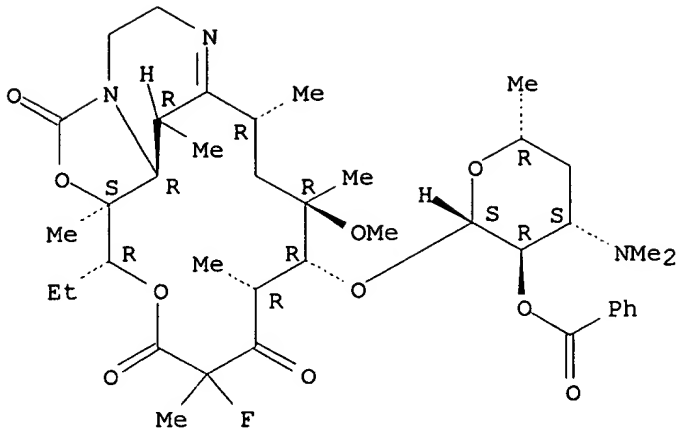
RN 223508-03-0 CAPLUS
CN 14,1-(Nitriloethano)-2H-oxacyclotetradecino[4,3-d]oxazole-2,6,8(7H,9H)-trione, 7-bromo-4-ethyl-3a,4,10,11,12,13,15,15a-octahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **223507-98-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of 2-halo-6-O-substituted ketolide erythromycins as antibacterial agents)
RN 223507-98-0 CAPLUS
CN 14,1-(Nitriloethano)-2H-oxacyclotetradecino[4,3-d]oxazole-2,6,8(7H,9H)-trione, 10-[[2-O-benzoyl-3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-4-ethyl-7-fluoro-3a,4,10,11,12,13,15,15a-octahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-, (3aS,4R,9R,10R,11R,13R,15R,15aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

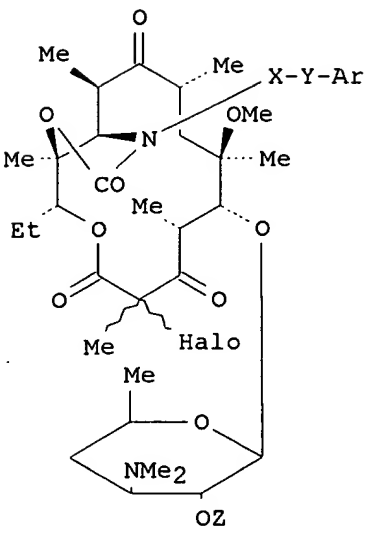


RE.CNT 2
RE
(1) Constantin, A; US 5444051 A 1995 CAPLUS
(2) Uclaf, R; FR 2742757 A 1997 CAPLUS

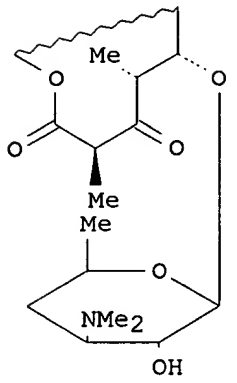
L12 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2001 ACS
AN 1997:522579 CAPLUS
DN 127:162066
TI Preparation of erythromycin derivatives as bactericides
IN Agouridas, Constantin; Broutain, Francois; Chantot, Jean Francois
PA Roussel-UCLAF, Fr.
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09176182	A2	19970708	JP 1996-354633	19961220
	FR 2742757	A1	19970627	FR 1995-15322	19951222
	FR 2742757	B1	19980130		
	EP 799833	A1	19971008	EP 1996-402821	19961219
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
	US 5747467	A	19980505	US 1996-767954	19961219

PRAI FR 1995-15322 19951222
OS CASREACT 127:162066; MARPAT 127:162066
GI



I



II

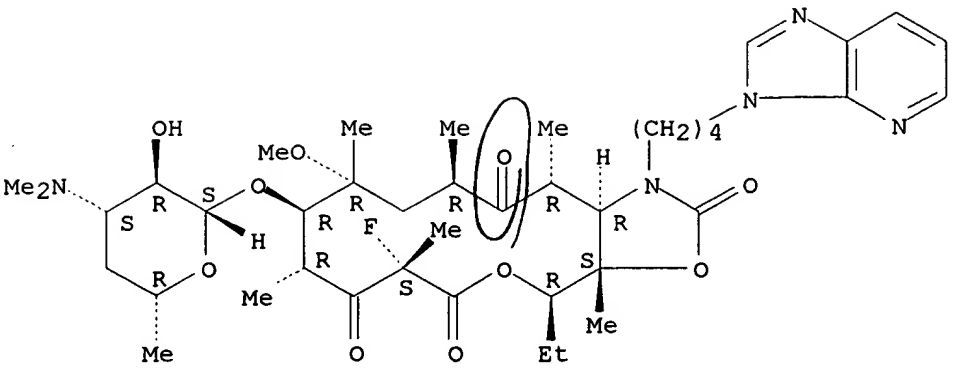
AB The title compds. [I; X = (NH)a, CH2, SO2, O; a = 0, 1; Y = (CH2)m(CH:CH)n(CH2)o; m + n + o .ltoreq. 8; n = 0, 1; Ar = (un)substituted aryl; Hal = halo; Z = H, O radical] are prepd. by halogenation of erythromycin derivs. (II; X, Y, Ar = same as above) with (PhSO2)2N-Hal (Hal = same as above). Thus, II [XY = (CH2)4, Ar = 3H-imidazo[4,5-b]pyridin-3-yl] was treated with NaH and then reacted with (PhSO2)2NF to give I (X, Y, Ar = same as above; Halo = F, Z = H), which showed MIC of 0.04 .mu.g/cm3 against Staphylococcus aureus 011UC4.

IT **193752-39-5P 193752-40-8P 193752-41-9P**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of erythromycin derivs. as bactericides)

RN 193752-39-5 CAPLUS

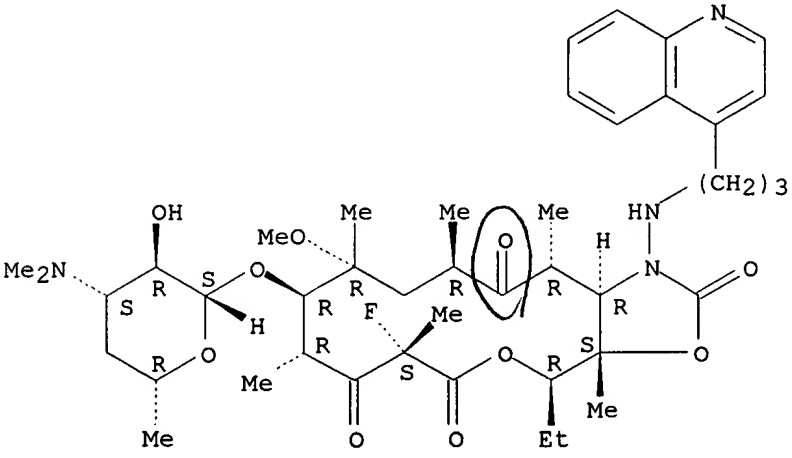
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone, 4-ethyl-7-fluorooctahydro-1-[4-(3H-imidazo[4,5-b]pyridin-3-yl)butyl]-11-methoxy-3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 193752-40-8 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone, 4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-1-[[3-(4-quinolinyl)propyl]amino]-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

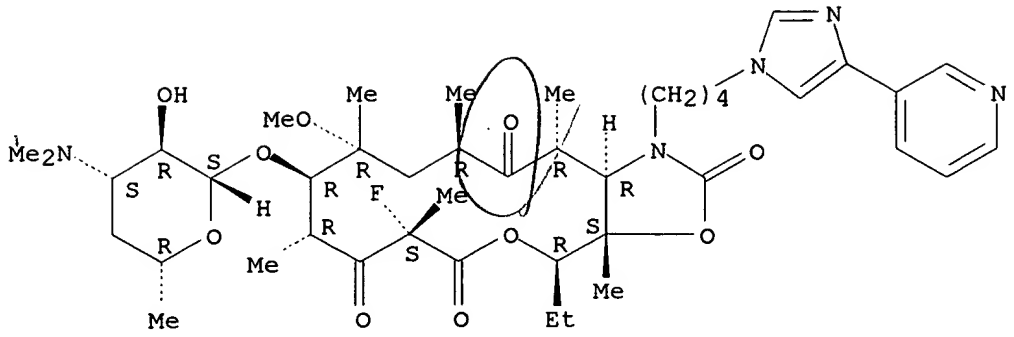
Absolute stereochemistry.



RN 193752-41-9 CAPLUS
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,8,14(1H,7H,9H)-tetrone,

4-ethyl-7-fluorooctahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-1-[4-[4-(3-pyridinyl)-1H-imidazol-1-yl]butyl]-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7S,9R,10R,11R,13R,15R,15aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.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R
S
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R
F
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R
O
S
O
R
S
O
Me
Me
Me
O
O
Et